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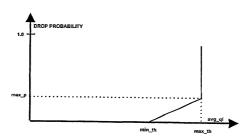




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(\$4) Title: METHOD, SYSTEM AND ROUTER PROVIDING ACTIVE QUEUE MANAGEMENT IN PACKET TRANSMISSION SYSTEMS



(57) Abstract

The present invention provides a method of active queue management for handling prioritized traffic in a packet transmission system. The method is able to provide differentiation between traffic originating from rate adaptive applications that respond to packet loss. Traffic is assigned one, of at least a first and second, drop precedent level, namely in profile and out of profile. The method includes the steps of calculating an average queue length, avg_qf, assigning minimum thresholds, min.th.in and min.th.out, for in profile packets and out of profile packets respectively, and a maximum threshold, max.fir, retaining all packets with their initially assigned drop precedent levels while the average queue length; less than, or equal to, a threshold th.in; assigning a drop probability to each packets, determined from the average queue length; retaining all packets while avg_qf is less than th.in; and dropping packets in accordance with their assigned drop probability, the parameter max_p.out is greater than max_p.in, where max_p.out is the maximum drop probability of packets marked as out of profile and max_p.in is the maximum drop probability of packets marked as in profile.